

LIST OF CLAIMS, SHOWING THE STATUS OF EACH CLAIM

Underlining denotes added text while strikethrough denotes deleted text.

IN THE CLAIMS:

1. (Amended) A cutinase variant comprising substituting one or more amino acids at residue positions corresponding to sites 180, 178 and 205~~, 57-66, 68, 85, 86, 88, 125-127, 130, 148-152, 154, 155, 176-183, or 204-211~~ of *Pseudomonas mendocina* ~~*Pseudomonas mendocina*~~ cutinase SEQ ID NO: 2, and homologous cutinases thereof, and wherein said variant has polyesterase activity.
2. (Amended) The cutinase of claim 1 derived from *Pseudomonas mendocina* ~~*Pseudomonas mendocina*~~.
3. The cutinase of claim 2, wherein the sequence is illustrated in SEQ ID NO: 2.
4. (Withdrawn)
5. (Withdrawn)
6. (Withdrawn)
7. (Withdrawn)
8. (Withdrawn)
9. (Amended) The cutinase of claim 1, wherein said variant has enhanced stability ~~includes the substitution of Phe 180 and substitution of Ser 205 enhances stability of the cutinase.~~
10. (Original) The cutinase of claim 1, wherein Phe is substituted with one of Ala, His, Lys, Leu, Asn, Pro or Glyc; and the Ser is substituted with Gly.

11. (Withdrawn)

12. (Amended) The cutinase of claim 1, wherein said variant has enhanced ~~includes the substitution of Phe 180 with Ile enhances polyesterase activity of the cutinase.~~

13. (Amended) The cutinase of claim 1, wherein said variant includes the substitution of Phe 180 with one of Lys or Leucine and substitution of Ser 205 with Gly wherein said variant has enhanced ~~enhances polyesterase activity of the cutinase.~~

14. (Amended) The cutinase of claim 1, wherein said variant includes the substitution of Phe 180 with Asn, wherein said variant has enhanced ~~enhances polyesterase activity of the cutinase.~~

15. (Amended) The cutinase of claim 1, wherein said variant includes the substitution of Phe 180 with one of Asn, Pro, or Ser, and substitution of Ser 205 with Gly, wherein said variant has enhanced ~~enhances polyesterase activity of the cutinase.~~

16. (Amended) The cutinase of claim 1, wherein said variant includes the substitution of Gly 59 with Phe or Leucine, wherein said variant has enhanced ~~enhances polyesterase activity of the cutinase.~~

17. (Withdrawn)

18. (Withdrawn)

19. (Amended) The cutinase of claim 1, wherein said variant comprises ~~includes the following substitutions to enhance polyesterase activity of the cutinase: Ile 178 with Met; Phe 180 with Val; and Ser 205 with Gly, wherein said variant has enhanced polyesterase activity.~~

20. (Withdrawn)

21. (Withdrawn)

22. (Withdrawn)

23. (Withdrawn)

24. (Withdrawn)

25. (Withdrawn)

26. (Withdrawn)

27. (Amended) The cutinase of claim 1, wherein said variant includes the substitution of Phe 180 with one of Ile, Leu, Asn, and Pro, wherein said variant has enhanced ~~enhances stability of the cutinase.~~

28. (Amended) A cutinase variant comprising substituting one or more amino acids at residue positions corresponding to sites 180, 178 and 205, ~~57-66, 68, 85, 86, 88, 125-127, 130, 148-152, 154, 155, 176-183, or 204-211~~ of *Pseudomonas mendocina* ~~*Pseudomonas mendocina*~~ cutinase SEQ ID NO: 2, and homologous cutinases thereof, and wherein said variant is thermostable and has hydrolytic activity on polyester.

29. (Amended) The cutinase variant of claim 28 derived from *Pseudomonas* ~~*Pseudomonas*~~ species.